



JAN 6 1993

ORIGINAL

## MATERIAL SAFETY DATA SHEET

## PRODUCT

NALCLEAN 2568 SCALE REMOVER

Emergency Telephone Number

Medical (708) 920-1510 (24 hours)

## SECTION 1 PRODUCT IDENTIFICATION

TRADE NAME: NALCLEAN 2568 SCALE REMOVER

DESCRIPTION: Sulfamic acid, sodium mercaptobenzothiazole and sodium phosphate

NFPA 704M/HMIS RATING: 3/3 HEALTH 0/0 FLAMMABILITY 0/0 REACTIVITY 0 OTHER  
0=Insignificant 1=Slight 2=Moderate 3=High 4=Extreme

## SECTION 2 HAZARDOUS INGREDIENTS

Our hazard evaluation has identified the following chemical ingredient(s) as hazardous under OSHA's Hazard Communication Rule, 29 CFR 1910.1200. Consult Section 14 for the nature of the hazard(s).

INGREDIENT(S)	CAS #	APPROX.%
Sulfamic acid	5329-14-6	70-100
Sodium mercaptobenzothiazole	2492-26-4	1-5

## SECTION 3 PRECAUTIONARY LABEL INFORMATION

WARNING: Causes eye injury and skin irritation. May be harmful if swallowed. Do not get in eyes. Avoid contact with skin and clothing. Wear goggles or face shield and rubber gloves when handling. Avoid breathing dust. Do not take internally.

Empty containers may contain residual product. Do not reuse container unless properly reconditioned.

## SECTION 4 FIRST AID INFORMATION

EYES:	Flush with water for 15 minutes. Call a physician.
SKIN:	Flush with water for 15 minutes. Call a physician.
INGESTION:	Do not induce vomiting. Give water. Call a physician.
INHALATION:	Remove to fresh air. Treat symptoms. Call a physician.

NOTE TO PHYSICIAN: Based on the individual reactions of the patient, the physician's judgment should be used to control symptoms and clinical condition.

CAUTION: If unconscious, having trouble breathing or in convulsions, do not induce vomiting or give water.

## SECTION 5 HEALTH EFFECTS INFORMATION

PRIMARY ROUTE(S) OF EXPOSURE: Eye, Skin, Inhalation



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## SECTION 5 HEALTH EFFECTS INFORMATION

( CONTINUED )

EYE CONTACT: Corrosive to the eyes with possible permanent damage depending on the length of exposure and on the first aid action given.

SKIN CONTACT: Corrosive to the skin, possibly resulting in third degree burns depending on the length of exposure and on the first aid action given. Can cause allergic contact dermatitis in susceptible individuals.

INHALATION: Can cause severe respiratory irritation. Can cause an allergic reaction in susceptible individuals.

SYMPTOMS OF EXPOSURE: A review of available data does not identify any symptoms from exposure.

AGGRAVATION OF EXISTING CONDITIONS: A review of available data does not identify any worsening of existing conditions.

## SECTION 6 TOXICOLOGY INFORMATION

ACUTE TOXICITY STUDIES: Acute toxicity studies have not been conducted on this product, but toxicity studies of the ingredient(s) in Section 2 have been reviewed. The results are shown below.

ACUTE ORAL TOXICITY (ALBINO RATS):  
Sodium mercaptobenzothiazole LD<sub>50</sub> = 3,120 mg/kg

SKIN SENSITIZATION: Sodium mercaptobenzothiazole may cause sensitization in susceptible individuals.

CHRONIC TOXICITY RESULTS: Sodium mercaptobenzothiazole. A chronic feeding laboratory study of 120 ppm in the diet showed no effects.

## SECTION 7 PHYSICAL AND CHEMICAL PROPERTIES

COLOR: Violet to blue	FORM: Powder	ODOR: Sweet
BULK DENSITY:	80-100 lbs/ft <sup>3</sup>	
SOLUBILITY IN WATER:	Partially	
pH (at 3%) =	Less than 2.0	ASTM E-70
FLASH POINT:	Not applicable	

NOTE: These physical properties are typical values for this product.

## SECTION 8 FIRE AND EXPLOSION INFORMATION

FLASH POINT: Not applicable



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## SECTION 8 FIRE AND EXPLOSION INFORMATION

( CONTINUED )

EXTINGUISHING MEDIA: Not applicable

UNUSUAL FIRE AND EXPLOSION HAZARD: May evolve SO<sub>x</sub> under fire conditions.

Contact with reactive metals (e.g, aluminum) may result in the generation of flammable hydrogen gas.

## SECTION 9 REACTIVITY INFORMATION

INCOMPATIBILITY: Avoid alkaline materials (eg. ammonia and its solutions, carbonates, sodium hydroxide (caustic), potassium hydroxide, calcium hydroxide (lime), cyanides, sulfides, hypochlorites, chlorites) which can generate heat with splattering or boiling and the release of toxic fumes.

THERMAL DECOMPOSITION PRODUCTS: In the event of combustion CO, CO<sub>2</sub>, SO<sub>x</sub> may be formed. Do not breathe smoke or fumes. Wear suitable protective equipment.

## SECTION 10 PERSONAL PROTECTION EQUIPMENT

RESPIRATORY PROTECTION: If it is possible to generate dust, wear a NIOSH approved or equivalent dust respirator.

For large spills, entry into large tanks, vessels or enclosed small spaces with inadequate ventilation, a pressure-demand, self-contained breathing apparatus is recommended.

VENTILATION: Use general ventilation with local exhaust ventilation to maintain dust levels to within the TLV (see Section 14).

PROTECTIVE EQUIPMENT: Wear gloves, boots, aprons or a slicker suit to avoid skin contact. Chemical goggles and face shield are also recommended. An eye wash fountain should be available.

If clothing is contaminated, remove clothing and thoroughly wash the affected area. Launder contaminated clothing before reuse.

## SECTION 11 SPILL AND DISPOSAL INFORMATION

IN CASE OF TRANSPORTATION ACCIDENTS, CALL THE FOLLOWING 24-HOUR TELEPHONE NUMBER (708-920-1510)

SPILL CONTROL AND RECOVERY:



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## SECTION 11 SPILL AND DISPOSAL INFORMATION

( CONTINUED )

Solid spills: Sweep or vacuum up and reclaim into recovery or salvage drums for disposal. Wear the protective equipment specified in Section 10. Refer to CERCLA in Section 14.

DISPOSAL: If this product becomes a waste, it does not meet the criteria of a hazardous waste as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261, since it does not have the characteristics of Subpart C, nor is it listed under Subpart D.

As a non-hazardous solid waste, it can be disposed of in an industrial waste landfill in accordance with local, state, and federal regulations.

## SECTION 12 ENVIRONMENTAL INFORMATION

### AQUATIC DATA:

96 hour static acute  $LC_{50}$  to Bluegill Sunfish = Greater than 10 ppm, less than 100 ppm

96 hour static acute  $LC_{50}$  to Rainbow Trout = Greater than 10 ppm, less than 100 ppm

If released into the environment, see CERCLA in Section 14.

## SECTION 13 TRANSPORTATION INFORMATION

DOT PROPER SHIPPING NAME/HAZARD CODE - PRODUCT IS NOT REGULATED DURING TRANSPORTATION

## SECTION 14 REGULATORY INFORMATION

The following regulations apply to this product.

### FEDERAL REGULATIONS:

OSHA'S HAZARD COMMUNICATION RULE, 29 CFR 1910.1200:

Based on our hazard evaluation, the following ingredients in this product are hazardous and the reasons are shown below.

Sodium mercaptobenzothiazole - Sensitizer  
Sulfamic acid - Severe irritant

CERCLA/SUPERFUND, 40 CFR 117, 302:

Notification of spills of this product is not required.



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## SECTION 14 REGULATORY INFORMATION

( CONTINUED )

SARA/SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986  
(TITLE III) - SECTIONS 302, 311, 312 AND 313:

SECTION 302 - EXTREMELY HAZARDOUS SUBSTANCES (40 CFR 355):  
This product does not contain ingredients listed in Appendix A and B as an  
Extremely Hazardous Substance.

SECTIONS 311 and 312 - MATERIAL SAFETY DATA SHEET REQUIREMENTS (40 CFR 370):  
Our hazard evaluation has found this product to be hazardous. The product  
should be reported under the following EPA hazard categories:

XX Immediate (acute) health hazard  
-- Delayed (chronic) health hazard  
-- Fire hazard  
-- Sudden release of pressure hazard  
-- Reactive hazard

SECTION 313 - LIST OF TOXIC CHEMICALS (40 CFR 372):  
This product does not contain ingredients on the List of Toxic Chemicals.

TOXIC SUBSTANCES CONTROL ACT (TSCA):  
The chemical ingredients in this product are on the 8(b) Inventory List  
(40 CFR 710).

U. S. DEPARTMENT OF AGRICULTURE (USDA):  
USDA Inspection and Grading Programs - Food Safety and Inspection Service:  
This product is authorized by USDA for use in federally inspected  
meat and poultry plants. Authorized uses are under category G7, A3.

RESOURCE CONSERVATION AND RECOVERY ACT (RCRA), 40 CFR 261 SUBPART C & D:  
Consult Section 11 for RCRA classification.

FEDERAL WATER POLLUTION CONTROL ACT, CLEAN WATER ACT, 40 CFR 401.15  
(formerly Sec. 307), 40 CFR 116 (formerly Sec. 311):  
None of the ingredients are specifically listed.

Clean Air Act, Sec. 111 (40 CFR 60), Sec. 112 (40 CFR 61, 1990 Amendments):  
This product does not contain ingredients covered by the Clean Air Act.

## STATE REGULATIONS:

CALIFORNIA PROPOSITION 65:  
This product does not contain any chemicals which require warning under  
California Proposition 65.



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## SECTION 14 REGULATORY INFORMATION

( CONTINUED )

### MICHIGAN CRITICAL MATERIALS:

This product does not contain ingredients listed on the Michigan Critical Materials Register.

### STATE RIGHT TO KNOW LAWS:

The following ingredient(s) are disclosed for compliance with State Right To Know Laws:

Phosphate	Trade secret
Sodium mercaptobenzothiazole	2492-26-4
Sulfamic acid	5329-14-6

### INTERNATIONAL REGULATIONS:

This is a WHMIS controlled product under The House of Commons of Canada Bill C-70 (Class D2B). The product contains the following substance(s), from the Ingredient Disclosure List or has been evaluated based on its toxicological properties, to contain the following hazardous ingredient(s):

Chemical Name	CAS #	% Concentration Range
Sulfamic acid	5329-14-6	70-100
Sodium mercaptobenzothiazole	2492-26-4	1-5

## SECTION 15 ADDITIONAL INFORMATION

Nalco internal number F06964

This product can react with metals to generate flammable hydrogen gas. Provide suitable venting when cleaning closed systems. Keep open flames away from the vent during and immediately following cleaning.

## SECTION 16 USER'S RESPONSIBILITY

This product material safety data sheet provides health and safety information. The product is to be used in applications consistent with our product literature. Individuals handling this product should be informed of the recommended safety precautions and should have access to this information. For any other uses, exposures should be evaluated so that appropriate handling practices and training programs can be established to ensure safe workplace operations. Please consult your local sales representative for any further information.



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## SECTION 17 BIBLIOGRAPHY

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Title 29 Code of Federal Regulations Part 1910, Subpart Z, Toxic and Hazardous Substances, Occupational Safety and Health Administration (OSHA).

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